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Central purpose mixing and grinding unit - uses two parallel shafts, one
having two, and other four, blade helical elements in horizontal
conjugated tubes with drive

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Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1669522	A1	19910815	SU 4704641	A	19890614	199222 B

Priority Applications (No Type Date): SU 4704641 A 19890614

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
SU 1669522	A1	3	B01F-007/08	

Abstract (Basic): SU 1669522 A

The mixer has a horizontal housing the bottom of which is made from two conjugated cylinders (2) (in parallel) with loading and unloading apertures. The material to be processed is fed via loading aperture. Drive causes shafts (6) and (7) to rotate. The material is simultaneously ground and transported to an aperture by the helices. Captured material, finding itself between each pair of blades, enters into a complex motion causing it to flow over to the gap between the blades along their surfaces along the radial axis.

The end of the blade of the double bladed element removes excess material from the surface of the four bladed element. Double bladed mixing elements (8) are arranged in a helical fashion alternating along shaft (6) from left to right, and the four bladed mixing elements (9) are arranged in a similar way along shaft (7). The angle of the helix of the double blades is twice as great as that of the helix of the four blades (the angles equal accordingly the smallest and largest angle of natural slope for the processing of the materials). The helices of the four blades are opposite to those of the two blades. There are slots at the ends of the blades of the double bladed elements (8).

USE/ADVANTAGE - May be used for more efficient mixing (e.g. in the building material, food preparation and chemical industries).

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Title Terms: CENTRAL; PURPOSE; MIX; GRIND; UNIT; TWO; PARALLEL; SHAFT; ONE;
TWO; FOUR; BLADE; HELICAL; ELEMENT; HORIZONTAL; CONJUGATE; TUBE; DRIVE

Derwent Class: J02

International Patent Class (Main): B01F-007/08

File Segment: CPI

Manual Codes (CPI/A-N): J02-A02B